

Abstract of the Disclosure

A device isolation structure in a semiconductor device and a method for fabricating the same are disclosed. A trench is formed in a semiconductor substrate to confine a plurality of active regions, an insulating material is
5 deposited to fill the trench and the insulating material having a portion extending from the trench to above the semiconductor substrate, and a trench oxidation preventive film is formed on the insulating material. The semiconductor device preferably further includes a gate line extending in one direction on the semiconductor substrate having the trench oxidation-
10 preventive film, and a sidewall spacer formed a sidewall of the gate line, wherein the trench oxidation-preventive film is disposed on the insulating material and disposed under the gate line and the sidewall spacer.